Release notes for ENDF/B Development e-079_Au_000 evaluation



October 13, 2016

• fudge-4.0 Warnings:

1. Mislabled emitted particle Reading ENDF file: ../e-079_Au_000.endf (Error # 0): ZAP messed up

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0

WARNING: Checking not yet implemented for energyLoss type data

3. FIXME: Generic fudge unimplemented message reaction label 2: e- + Au [excitation] / Product: e- (Error # 0): Generic unimp (c)

WARNING: Checking not yet implemented for energyLoss type data

• fudge-4.0 Errors:

1. Calculated and tabulated thresholds don't agree reaction label 0: e- + Au [large angle Coulomb scattering] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

2. Calculated and tabulated thresholds don't agree reaction label 1: e- + Au + gamma [bremsstrahlung] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

3. Calculated and tabulated thresholds don't agree reaction label 2: e- + Au [excitation] / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10. eV!

4. Calculated and tabulated thresholds don't agree reaction label 3: e- + e- + Au1s1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 80960. eV!

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 14336. eV!

6. Calculated and tabulated thresholds don't agree reaction label 5: e- + e- + Au2p1/2 / Cross section: (Error # 0): Threshold mismatch

WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 13776. eV!

7. Calculated and tabulated thresholds don't agree reaction label 6: e- + e- + Au2p3/2 / Cross section: (Error # 0): Threshold mismatch

```
WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 11922. eV!
```

- 8. Calculated and tabulated thresholds don't agree reaction label 7: e- + e- + Au3s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3401.4 eV!
- 9. Calculated and tabulated thresholds don't agree reaction label 8: e- + e- + Au3p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 3144.3 eV!
- 10. Calculated and tabulated thresholds don't agree reaction label 9: e- + e- + Au3p3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2734. eV!
- 11. Calculated and tabulated thresholds don't agree reaction label 10: e- + e- + Au3d3/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2300.7 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 2212.2 eV!
- 13. Calculated and tabulated thresholds don't agree reaction label 12: e- + e- + Au4s1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 747.4 eV!
- 14. Calculated and tabulated thresholds don't agree reaction label 13: $e^- + e^- + Au4p1/2$ / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 636.28 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 537.39 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 353.48 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 335.05 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 97.37 eV!

- 19. Calculated and tabulated thresholds don't agree reaction label 18: e- + e- + Au4f7/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 93.39 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 115.23 eV!
- 21. Calculated and tabulated thresholds don't agree reaction label 20: e- + e- + Au5p1/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 78.55 eV!
- 22. Calculated and tabulated thresholds don't agree reaction label 21: $e^- + e^- + Au5p3/2$ / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 61.37 eV!
- 23. Calculated and tabulated thresholds don't agree reaction label 22: $e^- + e^- + Au5d3/2$ / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 12.16 eV!
- 24. Calculated and tabulated thresholds don't agree reaction label 23: e- + e- + Au5d5/2 / Cross section: (Error # 0): Threshold mismatch
 - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 10.46 eV!
- - WARNING: Calculated and tabulated thresholds disagree: 1.e-5 eV vs 8.300000000000000 eV!
- xsectplotter Warnings:
 - 1. Mislabled emitted particle $Error: ZAP \ messed \ up$

stderr while processing crossSection

WARNING: photon most likely labelled as an electron (ZAP = 11), converting to ZAP = 0 \dots [4 more lines]